

AMENDMENTS TO THE DRAWINGS

The attached sheets of drawings (3) include changes to Figs. 11, 12A-D and 13A-E. These sheets include Figs. 11, 12A-D and 13A-E and replace original sheets including figure Figs. 11, 12A-D and 13A-E. The legend "RELATED ART" has added to these figures.

Attachment: Replacement Sheets
Annotated Sheets Showing Changes

REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejection of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-25 are pending in this application. Claims 1, 7, 9, 18 and 20 are independent.

II. REJECTIONS UNDER 35 U.S.C. §102(e) AND §103(a)

Claims 1-6 and 9-14 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by U.S. Publication No. 2002/0150392 to Yoo et al. (hereinafter merely, "Yoo").

Claims 7-8 and 18-19 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Yoo.

Claims 15-17 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Yoo in view of the admitted prior art.

Claim 1 recites, *inter alia*:

"A method for synchronizing between a transmitter and a receiver in a communications system, the method comprising ...

a clock comparison step of calculating, at the receiver end, a differential value between a count value of a decoder clock and the reference time of the transmission data;

and a clock adjustment step of adjusting a frequency of the decoder clock based on the differential value." (emphasis added)

As understood by the Applicants, Yoo relates to a method and apparatus for recording digital data streams, wherein when a digital broadcast data stream received by a set top box is transmitted through a communication interface such as an IEEE-1394 bus to a streamer, program clock references contained in the data stream become different from the actual arrival time of the digital data stream because of different clock frequencies of the digital data stream and communication interface. The difference is compensated before the digital data stream is recorded on the streamer. The method therein comprises detecting program clock references contained in received digital transport stream packets, creating the transport time reference of each transport stream packet based upon the detected program clock references and arrival times of the transport stream packets, and creating transport stream units by adding each of the created transport time reference to the associated transport stream packet.

Applicants respectfully submit that Yoo does not teach or disclose the above identified feature of claim 1. Specifically, Yoo does not teach or suggest a method for synchronizing between a transmitter and a receiver in a communications system comprising a clock comparison step of calculating, at the receiver end, a differential value between a count value of a decoder clock and the reference time of the transmission data, and a clock adjustment step of adjusting a frequency of the decoder clock based on the differential value, as recited in claim 1.

Furthermore, the Background in the specification as originally filed, specifically discusses the drawbacks of systems such as disclosed in Yoo, wherein a method for time correction through addition of a timestamp (time information) to packets in a transmission path is disclosed. With such methods, an encoding stream including SCRs or PCRs inserted thretoo at regular time intervals as shown in FIG. 13A is packetized for transmission as shown in FIG.

13C. For transmission, used are a pack size and a transmission timing as shown in FIG. 13B. At the time of transmission, the timestamp for the transmission path is added to the corresponding packet. Thus, even if the encoding stream just received at the receiver end becomes the one as shown in FIG. 13D due to packet loss, for example, the timestamp is used for time control of the encoding stream. In this manner, as denoted by D0 in FIG. 13E, SCRs or PCRs in the encoding stream are located at the same time intervals, leading to correct data decoding. However, with such a method of adding a timestamp to packets in the transmission path exemplarily using IEEE1394 serial interface, there arises also a problem of considerable increase of the entire system cost.

Therefore, unlike the method in which a packet in a transmission path is added with a timestamp therefor, such as that disclosed in Yoo, the synchronization method of the instant invention does not increase the system cost. Thus, the encoder and decoder ends can be successfully synchronized together using only in-specs information such as MPEG-2.

Therefore, Applicants respectfully submit that claim 1 is patentable. Claims 7, 9, 18 and 20, which are similar in scope to claim 1, are also patentable for similar reasons.

III. DEPENDENT CLAIMS

The other claims in this application are each dependent from one of the independent claims discussed above and are therefore believed patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

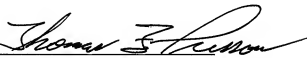
CONCLUSION

In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicant respectfully requests early passage to issue of the present application.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

Respectfully submitted,

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